BONNEVILLE POWER ADMINISTRATION

Energy EFFICIENCY Customer Newsletter

OCTOBER 2007, VOLUME 12, ISSUE 1

October Implementation Manual Available: http://www.bpa.gov/Energy/N/projects/post2006conservation/manual/

Utilities Cooperate to Illuminate Monument School District

To the credit of two neighboring Oregon cooperatives, Columbia Power and Oregon Trail Electric, the Monument School District (Grant County, Ore.) is benefiting from a recent lighting upgrade.

The lighting upgrades in this rural school district were completed just in time for the fall 2007 school year. Benefits to the school district include a reduction in energy costs which frees funds for other programs, simplified lamp maintenance and better quality lighting.

Each of the electric co-ops is unique in terms of size, conservation potential and resources to staff conservation activity. Columbia Power provided funding through their BPA Conservation Rate Credit. In addition; the Oregon Department of Energy (ODOE) provided Williams Settlement Funds and the Oregon State Business Energy Tax Credit. The school district also provided a cost share.

Oregon Trail generously shared their Commercial Lighting Program expertise and experience with Columbia Power. Steve Schauer, Oregon Trail Member Services Manager, led the charge to update a 2003 facility audit, arrange for bids, coordinate with the ODOE for Williams Settlement Funds and to obtain a partner for the Business Energy Tax Credit. In addition, he communicated with school officials to assure and inform them of the process and provided Planning, Tracking and Reporting system (PTR) assistance to Patti Engle at Columbia Power.

Good work!

-- Chris Tash (509) 527-6217

Energy Smart Design™ - It's Back!

In 1987, BPA launched the Energy Smart Design™ Program (ESD) for commercial buildings. ESD offered design assistance and financial incentives for prescriptive conservation measures in new and renovated commercial buildings. ESD has been resurrected by BPA and is an umbrella program for new commercial construction activities beginning October 1.

First under the ESD umbrella is Energy Smart Design™ - Office, through which BPA offers credits

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Commercial/Industrial Lighting Northwest Trade Ally Network

Savings from lighting measures account for almost 25 percent of BPA's annual Commercial and Industrial Sector conservation targets. One proven approach used by utilities and public benefits administrators from across the country to leverage their efficiency investments, is to develop and support a variety of trade networks. With guidance

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Inside

NORPAC Energy Champion

Mark Higginson, Senior Electrical Engineer at North Pacific Paper Corporation (NORPAC), is an energy efficiency champion.

Mark Higginson, Senior Electrical Engineer at North Pacific Paper Corporation (NORPAC) is an energy efficiency champion. He has sponsored a dozen energy efficiency projects at NORPAC. As a result of his hard work and persistence, 50 new energy projects are in the implementation process. NORPAC is located in Cowlitz PUD service territory in Longview, Wash. Mark has worked with Cowlitz PUD Conservation Manager Jim Wellcome for more than 12 years.

Fourteen years ago while working at Wauna Paper Mill near Clatskanie, Ore., Mark met and worked with Paul Skarra, Clatskanie PUD; Brent Barclay, Columbia River PUD and BPA staff in the Portland office.

Energy Efficiency caught up with Mark in August for the following interview.

When and how did you get involved in energy efficiency projects at Wauna Paper Mill?

In the early nineties, I learned about energy efficiency industrial program offerings through Clatskanie PUD, and I decided in January 1993 to try a project that involved replacing a drive on a paper machine fan pump. The drive replaced a water-cooled eddy current clutch with a direct current (DC) drive.

I met BPA Energy Efficiency engineer Chris Milan that year. I had a deadline to present a proposal for an energy efficiency and power-factor control project. With Chris' help, we met the deadline. I was invited to study an energy project at the Chevron Plant in Columbia River PUD service territory and wanted to replicate that project at Wauna. At the measurement and verification (M&V) stage we learned the technology was not feasible for our mill. Still, it was a good learning experience.

That was the beginning of collaborations with Chris. Cooperation gets energy efficiency projects done. It takes all of us - the utility staff, BPA, plant management and workers.

What projects stand out as being particularly successful and why?

We've had a succession of multi-million dollar efficiency projects at Wauna. One stands out: high-speed refining, which is a system for the thermomechanical refining of wood chips. It was a big project and involved new technology.

The decision to go ahead involved considerable risk, so it went all the way up to the corporate office. We did an effective sales job. BPA staff helped me convince the managers that this was worth the risk. Critical thinking was required, and we collaborated all the way. The company tried a new application with a new twist, took on the risk, and it worked out very well.

When I arrived at NORPAC, I found various energy efficiency feasibility studies had been done, but few projects were completed. Cowlitz PUD had available funds, but it was getting toward the end of their fiscal year. Everybody moved fast to take advantage of those funds; Cowlitz approved the projects, two crews tackled the job, and we met the deadline for installing medium voltage drives, two 1,500-HP medium voltage fans and a 600-HP medium voltage pump.

What are some barriers to completing industrial energy efficiency projects?

Energy efficiency projects create additional engineering and project management work. We

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NORPAC Energy Champion

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may all agree that we have a terrific idea for a variable speed drive project, but before the project can be completed and saving energy it must pass through various departments such as accounting, engineering, operations, and safety, for review and approval.

I need time to design the change in the system, ensure it meets safety requirements, contract for installation and bring the workers up to speed. Projects require additional time and resources at every level - identifying projects, getting a handle on the benefits, re-checking estimates, creating proposals and convincing decision-makers to support the change. We have the desire and the knowledge of programs and benefits. We need time and resources to get to reality . . . If I had a wish, I'd ask for more engineering support.

In addition to a champion, what are other important influences in getting a project to completion?

Public opinion is important. Some towns have a mill that's considered an albatross to the town. These smoke-stack industries now have to win over public opinion. For nearly three decades, our company has had a good track record as an environmental steward managing resources. For instance, as part of our process of making paper, we recycle lots of newspapers; that source is declining as people read news online. We have to cut costs to stay alive. Partnerships with utilities work.

Chris Milan added, "Mark is a dedicated advocate for energy conservation. In addition to his hard work and persistence in getting energy projects implemented, he continues to market the benefits of BPA Energy Efficiency programs to other engineers, maintenance staff, and managers throughout the plant. I wish that we could clone him."

-- Becky Clark (503) 230-3158

SCL Funding Calculator

Check out the Seattle City Light funding calculator at http://www.ci.seattle.wa.us/light/Conserve/Business/cv4_ess.asp

Trade Ally Network

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provided by a 2006-2007 assessment of utility needs and with input from the Utility Sounding Board, BPA decided to move ahead and invest in a trade ally network (TAN) as a way to build regional infrastructure and capability.

According to Tim Scanlon, BPA's Commercial Sector Lead, "The network will be composed of those businesses that influence the sale and installation of commercial and industrial energy efficient lighting across the service areas of BPA's retail customer utilities." Participants will include electrical contractors and lighting installers, equipment distributors, manufacturer's representatives, lighting designers and trade associations. Businesses that choose to participate will receive training on lighting technologies, sales tips, subscription to a lighting newsletter and access to a Web site full of information and tools designed to help promote, sell and install efficient lighting. Look for additional information to come soon regarding training dates, the newsletter, and launch of the Web site.

To get the effort moving, in July of this year BPA hired Evergreen Consulting Group, LLC, to develop a regional TAN for commercial and industrial lighting. Evergreen has many years of experience developing and managing very successful lighting TANs for the Energy Trust of Oregon and PacifiCorp. Roger Spring, owner of Evergreen, will serve as Project Director.

Roger Spring/Brent Barclay

Brent Barclay, formerly with Columbia River PUD, will serve as Project Manager. The BPA Program Manager for the project is Lisa Perigo.

Please contact an Energy Efficiency Representative to discuss ways that the TAN can help meet utility efficiency goals.

-- Lisa Perigo (503) 230-3059

Submitted by Roger Spring and Brent Barclay, Evergreen Consulting Group

Energy Smart Design™ - It's Back!

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or reimbursement through the Conservation Rate Credit or Conservation Acquisition Agreement for specified energy efficiency measures that are incorporated at the design stage of a new, small office.

Energy conservation measures that are not implemented in new buildings are lost opportunities, because most of the savings cannot be captured cost effectively as retrofit measures. BPA considers commercial new construction a hard-to-reach market.

The ESD Office package of measures includes high performance technologies that are not standard practice and that exceed code regionwide. The ESD Office prescriptive package incentive is $0.50 per square foot for eligible office buildings is deemed and does not require building energy performance modeling. All required documentation will be delivered by the design professional associated with the project. The Northwest Energy Efficiency Alliance will provide training for design professionals.

Buildings eligible for ESD Office must be three stories or less, have 100,000 square feet or less of conditioned area, and have 30 percent or less window-to-wall area ratio

ESD Office saves between 10 percent and 20 percent of the energy used by a building built in accordance with energy codes. It is aligned with the 2005 Energy Policy Act lighting tax deduction, the Advanced Building Core Performance Guidelines, LEED prescriptive track and buildings should qualify for an ENERGY STAR® label (the ENERGY STAR label is based on actual performance).

More information on ESD Office is located at the following Web site:

http://www.bpa.gov/Energy/N/projects/ESD/index.cfm

-- Mira Vowles (503) 230-4796

EnergySmart Program Delivers

The EnergySmart program, launched April 2007, has delivered significant energy savings in grocery store refrigeration systems.

- The program has audited over 200 businesses in 26 utility service areas
- While grocery stores are the main target, participant's range from small, rural corner markets to an amusement park.
- 62 utilities have signed participation letters enabling EnergySmart to potentially reach two-thirds of all stores in smaller markets.
- EnergySmart retrofit projects range from advanced control systems for Fred Meyer, to simple gasket repairs at dozens of small corner markets. Over 2 million annual kWhs have been saved.
- An additional 2.5 million annual kWhs saved, and another 150 audits are forecast by end of the 2007 calendar year.

To learn more about the EnergySmart Program go to www.energysmartonline.org., or call PECI toll free at 1.800.230.9420 to speak to a program representative, or request program marketing materials.

-- Gary Smith (503) 230-3608

The BPA Energy Efficiency newsletter is published quarterly on or about the first day of the months of January, April, July, and October. Send contributions to Jean Oates, KLJB-1, Bonneville Power Administration, P.O. Box 3621, Portland, OR 97208, or e-mail your ideas/articles/photos to eenewsletter@bpa.gov.

Energy Efficiency Projects at Federal Columbia River Power System Facilities

Celilo converter station at The Dalles, Ore., is one of several BPA transmission facilities to receive energy efficiency upgrades over the past several years. These upgrades save Celilo about 1.2 million kilowatt-hours per year. (On average, the typical Northwest household consumes about 16,000 kWh/year.)

BPA Energy Efficiency engineers Jack Callahan, Tim Steele and Todd Amundson provided commissioning of the newly installed Celilo converter cooling system. System commissioning is a proactive process that ensures that a system operates at optimal performance. Among other benefits, commissioning can improve energy efficiency and result in lower repair and operating costs. As a result of the commissioning project the engineers found that the supplemental spray water system was necessary at high load and high temperature conditions. Celilo installed a water ionization system that allowed use of the spray water system on a regular basis.

Replacing burned-out incandescent light bulbs mounted on the high ceilings of the facility was a frequent maintenance task. Through its Federal Drop Ship program, EE sent energy-efficient compact fluorescent lights (CFLs) to Celilo to replace the existing bulbs.

Kathy Mauer, former Chief Substation Operator at Celilo, said, "Replacing the standard [incandescent] lights with CFLs not only saved energy in the front lobby, but we didn't have to change the bulbs for two years, resulting in manpower savings. Also, the quality of the lighting was better."

Other lighting improvements were made at Celilo as a result of a lighting audit conducted by EE

Replacing burned out incandescent light bulbs mounted on the high ceiling of the Celilo Converter Station lobby was a frequent, time consuming maintenance task before the bulbs were replaced with long-lasting compact fluorescent lights.

Celilo Substation Yard

engineers Craig Ciranny and Nelly Leap. The entire lighting system in the control room was re-engineered, and occupancy sensors were added in locations with periods of low or no occupancy.

According to Ciranny, program manager for energy efficiency improvements to the Federal Columbia River Power System, energy efficiency upgrades have also been completed at the following 10 dams:

- Bonneville
- John Day
- The Dalles
- Dworshak
- Chief Joseph
- McNary
- Ice Harbor
- Lower Monumental
- Little Goose
- Lower Granite

Projects are underway at Libby, Hungry Horse and Albeni Falls. Eventually, all 31 dams will receive upgrades, saving the region millions more kWh. These projects are part of EE's goal of upgrading all federal dams, transmission facilities and federal fish hatcheries.

Celilo converter station is the northern end of the high-voltage direct-current intertie that sends up to 3,100 MW south to Sylmar converter station in Los Angeles.

-- Craig Ciranny (503) 230-5865

Richland Energy Services Celebrates Public Power and Energy Awareness

Each October Richland Energy Services (Wash.) celebrates Public Power Week and Energy Awareness Month in a big way. This October is no exception.

Public Power Week was celebrated October 7-13. Journeyman Linemen conducted electrical safety demonstrations for Richland's third through fifth grade students. On October 11, customers joined RES staff at City Hall for Customer Appreciation Day.

Items given to customers at the event include:

- Shower heads
- Compact fluorescent lights (CFL)
- Energy tips booklets
- Insulator gaskets
- Balloons

In September, story time at the library was a good opportunity for Save a Watt to educate kids on electrical safety and conservation, as well as providing an opportunity to educate the parents about CFLs. The kids also did a CFL picture craft. RES staff cut out a CFL and the kids colored and decorated it. A puppet show was a fun way to compare an incandescent bulb with a CFL, stating the facts.

-- Dawn Senger, RES Energy Specialist
(509) 942-7436

Right: Save a Watt expounds on the benefits of CFLs.

Below: Children listen to Save a Watt during story time.

Utility Roundtable Meetings

Oct. 24: Spokane/TriCities (**2700 Duportail St., Rm # 110,** Richland, Wash.)
Nov. 1: Portland/Eugene (Florence, Ore.)
-- Seattle/Puget Sound (date/location TBD)
-- Southern Idaho (date/location TBD)
Nov. 7: Montana (Missoula)

Contact an Energy Efficiency Representative for more information

AIRMaster+
Specialist Qualification Training
October 23-26, 2007
Doubletree Hotel Seattle Airport
18740 International Boulevard
Phone: 360-956-2137

JANUARY 27-29, 2008
Portland, Oregon

Harvesting Clean Energy 8

www.harvestcleanenergy.org/conference

Northwest Public Power Association
2007-2008 Education & Conference Schedule

http://www.nwppa.org/html/web/2007-08_NWPPA_Education_Schedule.pdf

Oregon and Washington Rank Two and Three for Green

Vermont, Oregon and Washington are the top three (in the order listed with Vermont #1) "greenest" states in the nation.

On October 17, Forbes.com published the article America's Greenest States. The article includes a table of state rankings based on the level of vehicle miles traveled, alternative fuels, hybrid electric cars and number of LEED-certified buildings. Visit the following Web site to read the article:

http://www.forbes.com/2007/10/16/environment-energy-vermont-biz-beltway-cx_bw_mm_1017greenstates.html?feed=rss_news.

-- Submitted by Joel Myer, Mason Co. PUD No. 3

Mason County Utility Hydro Helps Minimize Northwest Carbon Footprint

Mason County PUD No. 3, Shelton, Wash., can thank nature for its relatively small carbon footprint from the generation of electricity. Burning fossil fuels for energy is considered one of the largest contributors to greenhouse gasses. However, the Pacific Northwest is much kinder to the environment than many other parts of the country.

According to a state-by-state inventory of greenhouse gas emissions from the federal Energy Information Administration (http://www.eia.doe.gov/environment.html), on average Washington State has 30 percent less emissions than the rest of the country. Much of this is attributable to the large amount of clean, non-polluting hydroelectricity from the Columbia River system.

Overall, public utilities tend to have a much cleaner mix of energy sources than other power providers in the Pacific Northwest. Of the utilities in Washington State that are subject to the renewable energy initiative (I-937), public utilities have a very small percentage of their fuel mix in fossil fuel plants. The fuel mix for these 14 public utilities averages about 3 percent each from coal and gas plants. For the four large investor-owned utilities, nearly 35 percent of their fuel mix includes coal and almost 12 percent natural gas for their energy.

Legislation passed in 2000 directed electric utilities in Washington to report their fuel mix to customers annually or semiannually depending upon the size of the utility. Hydroelectric power accounts for 85 percent of the Mason County PUD No. 3 2007 fuel mix.

The PUD is a locally controlled public utility that provides electricity to nearly 32,000 customers in most of Mason County and small portions of Kitsap and Grays Harbor Counties and also provides wholesale telecommunications services to its customers through a fiber optic network.

-- Joel Myer, Public Information Officer, Mason Co. PUD No. 3, (360) 432-5259

Managing Carbon: Policy & Practice

November 14, 2007

DoubleTree Hotel, Lloyd Center, Portland, OR
Presented by:
Northwest Environmental Business Council
Lovinger Kaufmann LLP
Call 503-227-6361 or e-mail sue@nebc.org

Calculating Carbon Emissions

Several carbon footprint calculators are available, including:

- hes.lbl.gov (residential)
- www.energydepot.com/pgect
- www.nwnatural.com
- www.energysavers.gov
- www.energystar.gov
- www.wateruseitwisely.com/index.shtml.

The Climate Trust has an excellent carbon footprint calculator http://www.carboncounter.org/offset-your-emissions/personal-calculator.aspx.

Your carbon footprint can get smaller.

To learn how you can join the effort to address climate change, visit:

http://www.epa.gov/climateleaders

Source of Footprint/Text:
Environmental Protection Agency,
Climate Leaders

Greenhouse Gas Reductions in Offices

A World Resources Institute (WRI) study helps offices reduce their greenhouse gas footprint http://pdf.wri.org/wri_co2guide.pdf .

The following are seven steps WRI recommends:

1. Secure employee and senior management support for the your office's CO2 reduction initiative.
2. Learn what a CO2 inventory is and how to plan one.
3. Learn what data is needed to calculate your organization's emissions and where to find the data.
4. Calculate your organization's emissions using the simple formulae in the study, or spreadsheets provided on-line at http://www.safeclimate.net or http://www.ghgprotocol.org.
5. Agree on an emissions reduction target.
6. Take action! Identify and implement opportunities to reduce your office's emissions. If necessary and/or appropriate, pursue options for investing in offsets - projects that help another organization reduce their emissions.
7. Reap benefits and be a leader! Report your organization's commitment and CO2 inventory publicly.

-- Mira Vowles (503) 230-4796

Climate Change and Energy Production and Usage

http://www.epa.gov/climatechange/effects/energy.html

Blowing in the Wind

BPA staff from Spokane and other eastside locations, toured Puget Sound Energy's Hopkins Ridge Wind Farm in August.

It was a beautiful August day when BPA staff from the eastside of the Cascade Mountains toured the Hopkins Ridge Wind Farm near Dayton, Wash.

In 2003 Puget Sound Energy developed a plan to acquire 10 percent of its electric energy from renewable resources by 2013. The Hopkins Ridge Wind Farm is one PSE generator of renewable energy. At peak capacity, Hopkins Ridge is capable of generating up to 150 megawatts.

PSE also developed the Wild Horse Wind Farm near Ellensburg, which brings them to about 5 percent renewables in its electric energy resource mix. At peak capacity, Wild Horse is capable of generating up to 229 megawatts.

These wind turbines are huge structures. The tower foundation is buried 25 - 32 feet and uses up to 260 cubic yards of concrete. A complete turbine is 351 feet from the ground to the tip of a vertical rotor blade. Towers are 221 feet tall to the rotor's hub and each of the rotor's three blades is 129 long and 11 feet wide. One long flat bed trailer is just 53 feet long, so extended semi-trailers are used to transport the blades. A minimum 9 mph is needed to rotate the blade. Peak generation is 31 mph and shut down is at constant wind speeds of 56 mph.

-- Rosalie Nourse (509) 625-1368

Solar Drag Race

Students Ferry County PUD (Republic, Wash.) Conservation Director John Friederichs has worked with since fourth and fifth grade built a solar-only (no batteries) dragster for the annual Solar Drag Race. The students - now sixth, seventh and eighth graders - beat the former high school record. They competed in the high school class since there is no class for middle school students. They not only broke the existing record, but they beat the team from Central Washington University. They were beaten by the open-class team, but have their sights set on CWU for next year.

The car was built using steel salvaged from a bus luggage rack, a DC motor from an exercise machine and motorcycle parts scrounged from

here and there. The paintwork was contributed by a local body shop and the kids raised the funds to buy the modules, provided at cost from a sympathetic supplier.

The team ranges in age from 11 to 15, with the exception of their teacher who is a duffer of 28. The students performed the necessary math regarding gearing and the series/parallel circuit design of the modules.

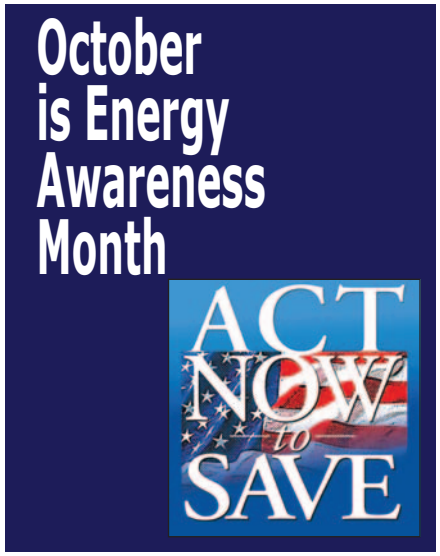
Friederichs said, "The teacher and I worked with a couple of the kids to build the frame. Then we had weekly class sessions here at the PUD with the tech club kids and the teacher. I covered how to calculate the gearing, electrical capacity and electrical requirements of the motor and how to best reconcile the three. Teacher Josh Zakar and I just ran herd on them."

-- Rosalie Nourse (509) 625-1368

Regional energy efficiency staff changes occur often. BPA invites its customer utilities and other regional energy entities to submit key events as they occur for people active in and known to the Northwest energy efficiency community. Please send milestones to: eenewsletter@bpa.gov. *(BPA reserves the right to determine if events are suitable for posting.)*

Northwest Energy Efficiency Community MILESTONES through September 2007

Barclay, Brent	New at Evergreen Consulting Group, Tigard, OR
Gage, Lauren	New lead of the BPA Energy Efficiency Evaluation/Market Research function, Portland
Gill, Rita	BPA, Portland, retired
Howard, Abigail	Joined the BPA Energy Efficiency Contract Administration group, Portland
Kenna, Jim	Associate State Director of the Bureau of Land Management (OR/WA); a federal Senior Executive Service candidate on a detail to BPA as the Energy Efficiency Marketing Manager, Portland (has since moved on to the next rotation in his detail - at the U.S. Office of Budget and Management in DC)
Lammers, Tim	New Columbia River PUD Energy Services Supervisor
Smith, Gary	DSM consultant; joined BPA Energy Efficiency as Program Manager for the grocery store and water-wastewater initiatives
Smith, Mary	New position as the Senior Manager of Energy Efficiency at Snohomish County PUD
Sporborg, Pam	Student intern working on the Utility Level Energy Demand Model in the BPA Energy Efficiency Planning group, Portland



How is NEEA funded?

NEEA is funded by 12 regional electric utilities, the Bonneville Power Administration (BPA) and the Energy Trust of Oregon (ETO), which pool their resources in order to make a greater impact on the regional marketplace. Because it pays on behalf of its electric utility customers, BPA provides approximately half of NEEA's annual budget. Backers make five-year commitments, and the present funding cycle ends in 2009.

How does NEEA create energy efficiency in the marketplace?

- Creating leverage - NEEA and local utilities leverage their resources and influence to achieve greater regional economies of scale for energy-efficient products and service.
- Providing regional resources - NEEA provides local utilities with marketing and training platforms that they can use to help their customers become more energy efficient.
- Encouraging new technologies - NEEA works to accelerate the emergence of energy-efficient products and services and to encourage their market adoption.

What is market transformation?

Market transformation (MT) is a strategy that promotes the manufacture and purchase of energy-efficient products. The aim is to change the market structure and behavior in a way that makes affordable, energy-saving options a normal part of the marketplace. It is one tool among many to create a more efficient future.

Why is market transformation an important strategy?

Energy efficiency initiatives need lots of support from many sources. Public service announcements, marketing and incentives cannot do it all. Targeting energy-efficient products at the manufacturing level is a high leverage tactic. Benefits are numerous and well worth the effort.

- Utility bills are reduced, giving commercial, industrial and residential consumers an economic edge
- The ultimate cost of the efficiency improvements is much less to utilities
- A healthier environment results from reducing pollution that would result from generating more electricity

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The Northwest Energy Efficiency Alliance (NEAA) was founded as a non-profit organization in 1996 by BPA, the region's investor-owned utilities and others to bring affordable energy-efficient products and services to the region. BPA provides nearly half of NEEA's funding. Many original NEEA programs, including the Lighting Design Laboratory in Seattle, originated at BPA but were transferred to NEEA to broaden their financial base and expand their regional scope.

Since NEEA's inception, the energy world has changed greatly, and many markets have been transformed. Some of NEEA's current market transformation "branding platforms" are:

- Residential: Northwest ENERGY STAR
- Commercial: BetterBricks
- Industrial/Agricultural: Industrial Efficiency Alliance (IEA)

NEEA also continues to work toward improved energy codes by funding code infrastructure and educating both those who set codes and who incorporate current code into building design.

NEEA funds are pooled and used to fund projects approved by the Board of Directors, currently chaired by BPA Energy Efficiency Vice-President Mike Weedall.

NEEA creates energy efficiency in the region by:

- Leveraging utility resources
- Promoting market adoption of energy-efficient products and services
- Providing marketing and training to utilities to help them successfully interact with and influence the energy behavior of their end-users

BPA and NEEA interact in many areas, including the IEA where BPA's Industrial Sector Lead Jennifer Eskil, who is on the IEA Advisory Committee, and others seek ways to influence industrial sector energy behavior.

NW Energy Efficiency Alliance, continued

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- Robust energy-efficiency practices demonstrate responsible environmental stewardship

What are the barriers to successful market transformation?

Probably the first major MT challenge is overcoming market barriers which inhibit the manufacture and purchase of energy-efficient products. Barriers include:

- Lack of energy-efficient products in stores
- Lack of consumer awareness of the benefits of selecting energy-efficient products and the resulting demand for stocking them on the shelf
- The general resistance consumers have to new products
- Market emphasis on the first cost instead of the overall cost to operate and maintain the product over its lifetime

Usually MT efforts are voluntary and take years to show results. For example:

- A common efficiency specification is researched, provided to manufacturers and efficiency advocates throughout the region or nation, and strategies are developed to intervene jointly in the market. While voluntary, this gets manufacturers thinking about a specific standard.
- Utilities and consumer awareness organizations work to educate the public.
- Incentives such as utility payments, product rebates or discount coupons, are typically offered.
- Frequently the standards prove their cost-effectiveness and are adopted in state and/or federal requirements.

Prices usually drop as a market is transformed, which increases consumer demand. Increased demand means increased production.

What are some of NEEA's recent activities in market transformation?

Major successes in NEEA's MT activities include the following:

- ENERGY STAR® CFL sales topped 10 million (when the project began in 1996, only about 100,000 were sold per year)
- Hospital corporations representing one-third of the region's hospital beds are committed to strategic energy management
- New federal washing machine efficiency standards took effect this year at the level of efficiency in the NEEA 1996 program launch
- Hewlett-Packard joined 80+, a program to improve efficiency of desktop computers and servers
- ENERGY STAR windows (or better) represent over 90 percent of the market, up from 15 percent in 1997 when the NEEA project began – with almost no utility incentives needed
- Ten Northwest food processors are considering continuous energy improvement plans

What are NEEA's plans for the future?

The organization plans to improve alignment between local efforts and regional market transformation activities. Work on communications and planning will improve collaboration with its sponsors.

Specific new technologies identified and promoted in 2006 that will come to fruition in the future include

- Paper stiffness sensor technology to allow on-line adjustments that reduce waste and the energy used in papermaking
- 80+ Efficient Power Supplies
- Distribution System Efficiency Initiative to study the reduction of operating voltage of electricity delivered to customers
- Desert CoolAire hybrid HVAC unit which might achieve a 50 percent energy reduction
- Ductless mini-split heat pumps
- LED lighting

Who are the NEEA board members?

The Board currently consists of members from public and investor-owned utilities, market actors, environmentalists, representatives from each of the four state governors (Ore., Wash., Mont. and Idaho), and non-voting staff from the regulatory commissions. The Board meets four times a year. Members serve three year terms, and the board chair serves a year as chair-elect before taking the job as chair. Board members are listed on the Web at http://www.nwalliance.org/aboutus/board.aspx.

-- Becky Clark (503) 230-3158